



**Tennessee Department of Environment and Conservation
Division of Water Pollution Control
Mining Section
3711 Middlebrook Pike
Knoxville, Tennessee 37921-6538
Phone (865) 594-6035 Fax (865) 594-5253**

December 1, 2008

**NOTICE OF DETERMINATION
OF NO DEGRADATION**

**NPDES Permit TN0069230 (New)
Santana Dredging Corporation
Shiloh Processing Facility
Hardin County**

Dear Interested Citizen:

An application for a new NPDES permit for the referenced facility was completed on November 7, 2008. The facility will provide on-shore processing for sand and gravel dredged from the adjacent Tennessee River. The proposed permit boundary includes 45.1 acres. The proposed site plan involves using an existing pond in conjunction with a new pretreatment settling basin to treat runoff and waste process water from the processing facility. The pond is designed to retain process-generated waste water and runoff for re-use. Any overflow from the pond will be monitored at Outfall 001 and discharged into an unnamed tributary to Bell Slough. Runoff from the stockpiles area will be treated in a sediment basin and discharged into an unnamed tributary to Snake Creek at Outfall 002. The treatment structures for these outfalls have been designed to contain and treat the runoff expected from a 10-yr/24-hr storm event. Storm water from the access road will be discharged into an unnamed tributary to Bell Slough and will be monitored at Outfall SW1.

This proposed facility will discharge treated wastewater and storm water from Outfall 001 into Bell Slough and from Outfall 002 into an unnamed tributary to Snake Creek in Hardin County, Tennessee. Additionally, treated storm water will be discharged from Outfall SW1 into an unnamed tributary to Bell Slough. These streams flow into the Tennessee River within two miles downstream of each outfall. The reach of the Tennessee River that receives flow from these outfalls (via Snake Creek and its tributaries) has been identified by the Division as Exceptional Tennessee Waters.

Tennessee's Anti-Degradation Policy is found in *Rules of the Department of Environment and Conservation, Chapter 1200-4-3*. The policy prohibits degradation of Exceptional Tennessee Waters unless and until it is determined by the state that a lowering of water quality is necessary to accommodate important economic or social development in the area where the waters are located. The Division must first determine whether or not a new or expanded discharge will result in degradation of high quality waters. The *Rules* define "de minimis" discharges as those being of small magnitude or a short duration and state that de minimis discharges shall not be considered degradation for the purposes of the Anti-Degradation policy.

The applicant submitted the required information for the permit application, including an analysis of reasonable alternatives to surface water discharge. Based on this information and supporting plans, the Division has determined that the proposed activity will not degrade Exceptional Tennessee Waters. This determination is discussed below.

The NPDES permit will limit the amount of Total Suspended Solids (TSS) that can be discharged into receiving waters. To assess the potential increase in pollutants due to the new discharge, we assumed a "worst-case scenario" of the maximum discharge volume and concentration at the period of lowest flow (when there will be the least dilution available). The details of this analysis are summarized below and can be found in the permit file.

- The TSS concentration in the discharge was assumed to be the maximum allowed by the permit (40 mg/L).
- The average stream background TSS was assumed at both 10 and 40 mg/L to assess a range of possible conditions. Recent water quality data in this reach of the Tennessee River were not available.
- The stream was assumed to be at the lowest one-day average flow with a return period of 10 years (aka, 1Q10 low flow). There is a 90% probability that the flow will be greater than or equal to this level.

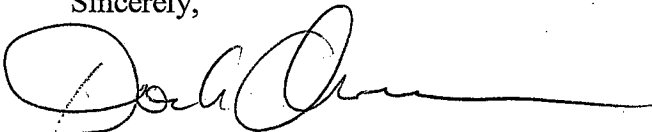
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The following statements support our determination that the proposed expansion activity will not degrade Tennessee River:

- 1) As a result of the analysis described above, the increase in TSS was determined to be 0.0 mg/L. The Division considers this to be a small magnitude.
- 2) The new outfalls will only discharge in direct response to precipitation; therefore, discharges will be of short duration.
- 3) The rainfall that induces a discharge at the proposed outfall will also increase the background stream flow condition, providing a higher mixing ratio than the low-flow scenario analyzed.
- 4) The proposed expansion will employ sediment basins sized for the expected runoff volume from a 10-yr/24-hr storm and a pretreatment basin for process-generated wastewater. These are preferred treatment alternatives that improve the removal efficiency of TSS prior to discharge from the site.

Based on the finding of no degradation, the Division has followed normal application review procedures and will issue a draft NPDES permit to the applicant. The draft permit is being announced in the list contained in this public notice for a 30-day comment period.

Sincerely,



Don A. Owens
NPDES Program Manager
Division of Water Pollution Control